



STATE OF MARYLAND

DMMH

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January 14, 2011

Public Health & Emergency Preparedness Bulletin: # 2011:01 Reporting for the week ending 01/08/11 (MMWR Week #01)

CURRENT HOMELAND SECURITY THREAT LEVELS

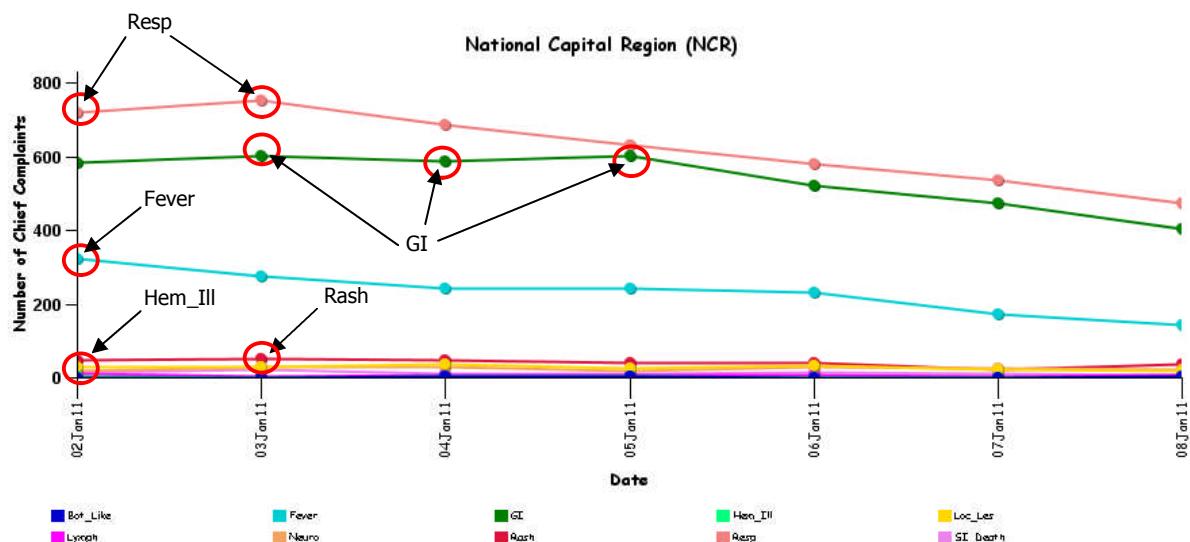
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

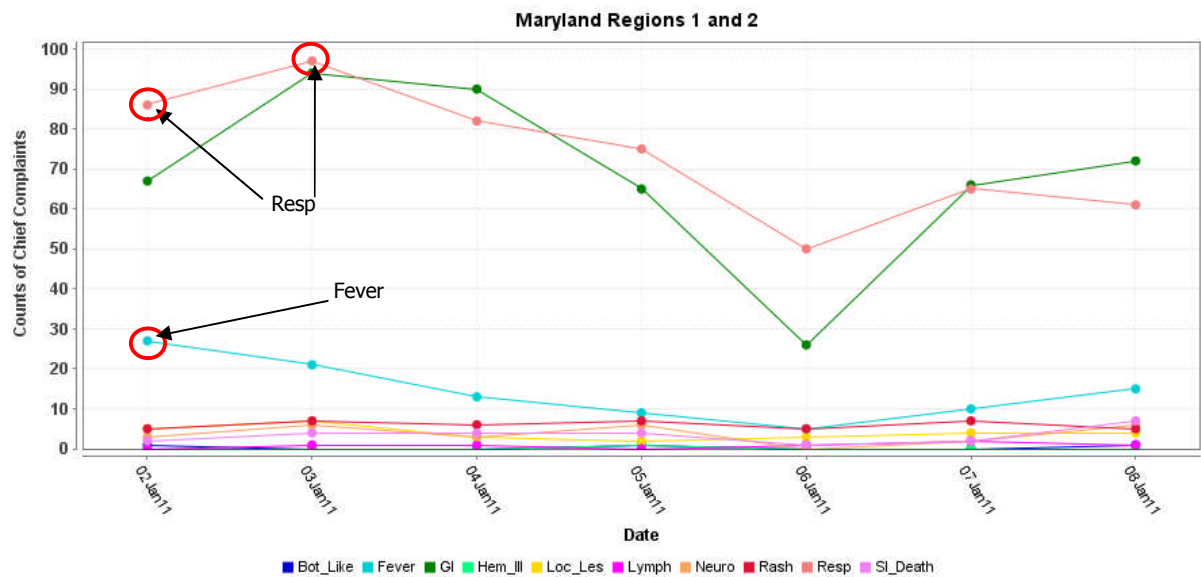
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

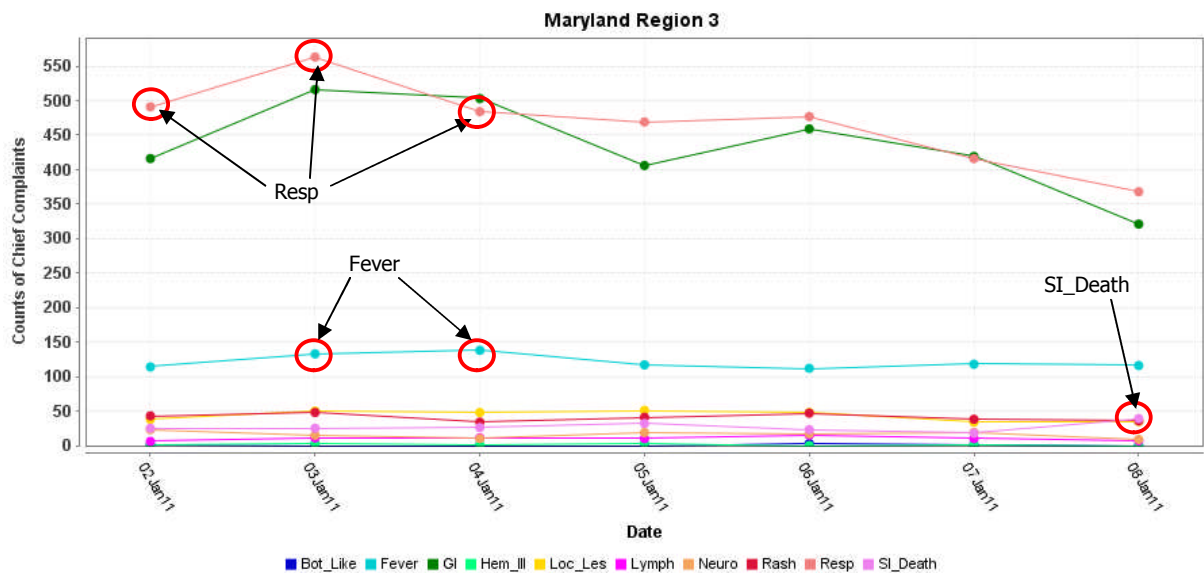


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

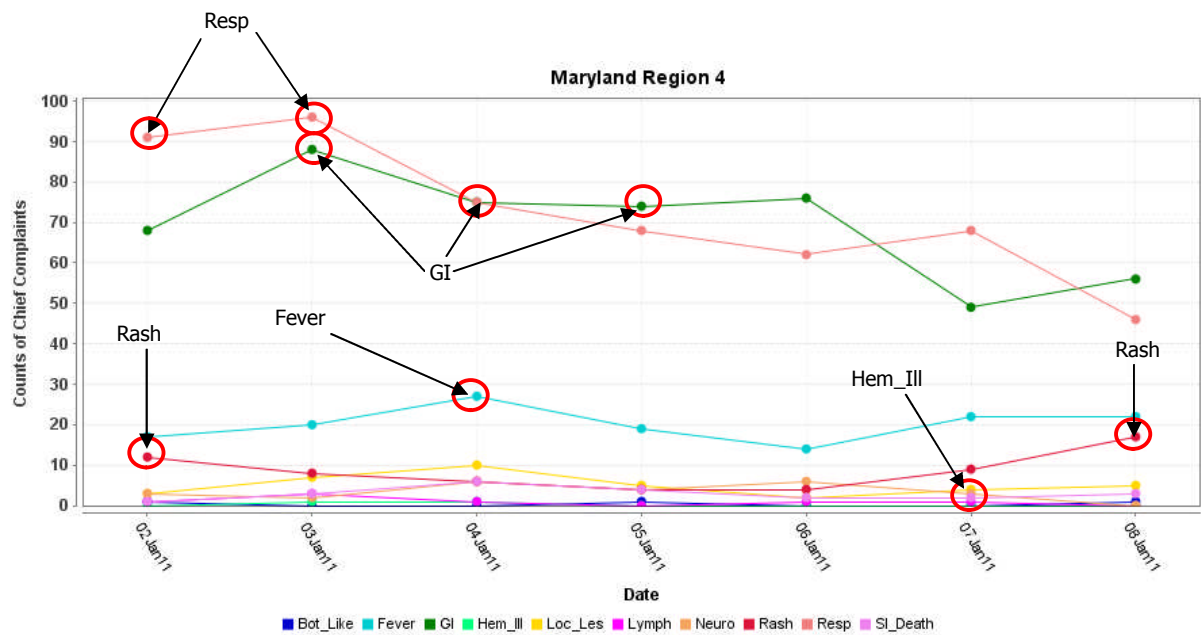
MARYLAND ESSENCE:



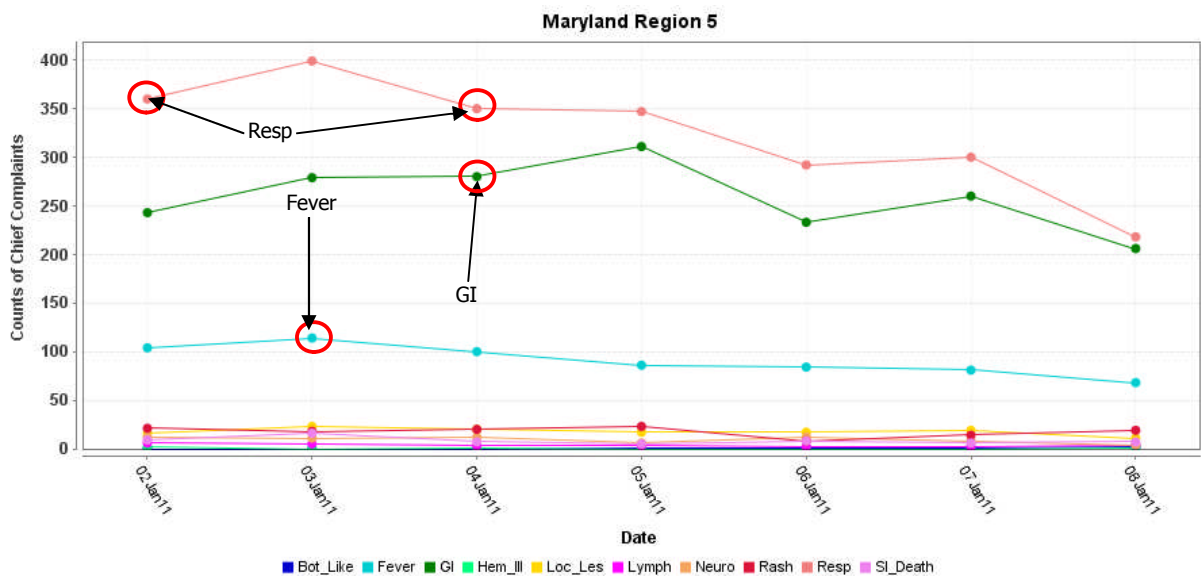
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

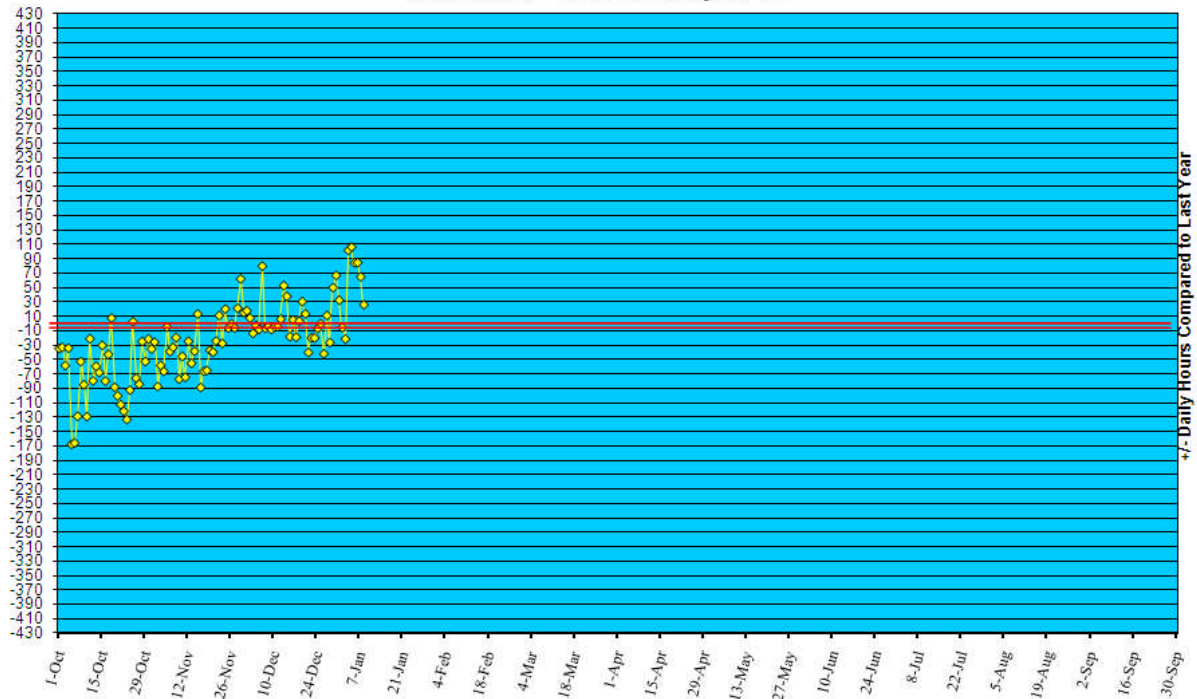


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/10.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '10 to January 8, '11



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (January 2 – January 8, 2011):	8	0
Prior week (December 26, 2010 – January 1, 2011):	17	0
Week#1, 2010 (January 3 – January 9, 2010):	21	0

Fifteen outbreaks were reported to DHMH during MMWR Week 1 (January 2 – January 8, 2011):

8 Gastroenteritis outbreaks

5 outbreaks of GASTROENTERITIS in Nursing Homes
3 outbreaks of GASTROENTERITIS in Assisted Living Facilities

7 Respiratory illness outbreaks

1 outbreak of INFLUENZA in a Nursing Home
1 outbreak of INFLUENZA in a Hospital
1 outbreak of ILI in a Nursing Home
2 outbreaks of ILI/pneumonia in Nursing Homes
1 outbreak of PNEUMONIA in a Nursing Home

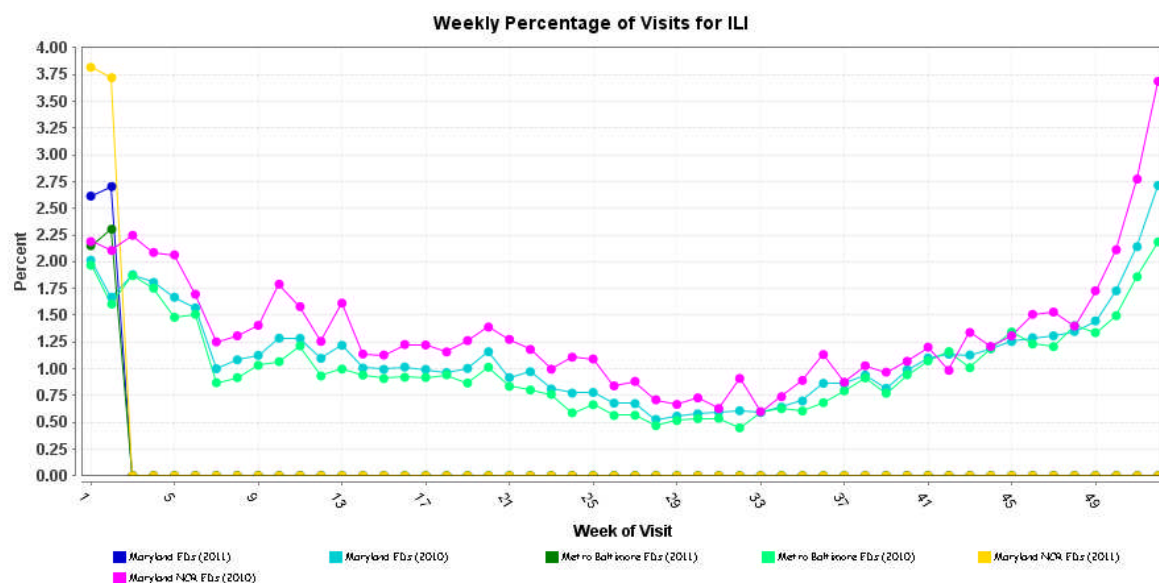
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity was WIDESPREAD for Week 1.

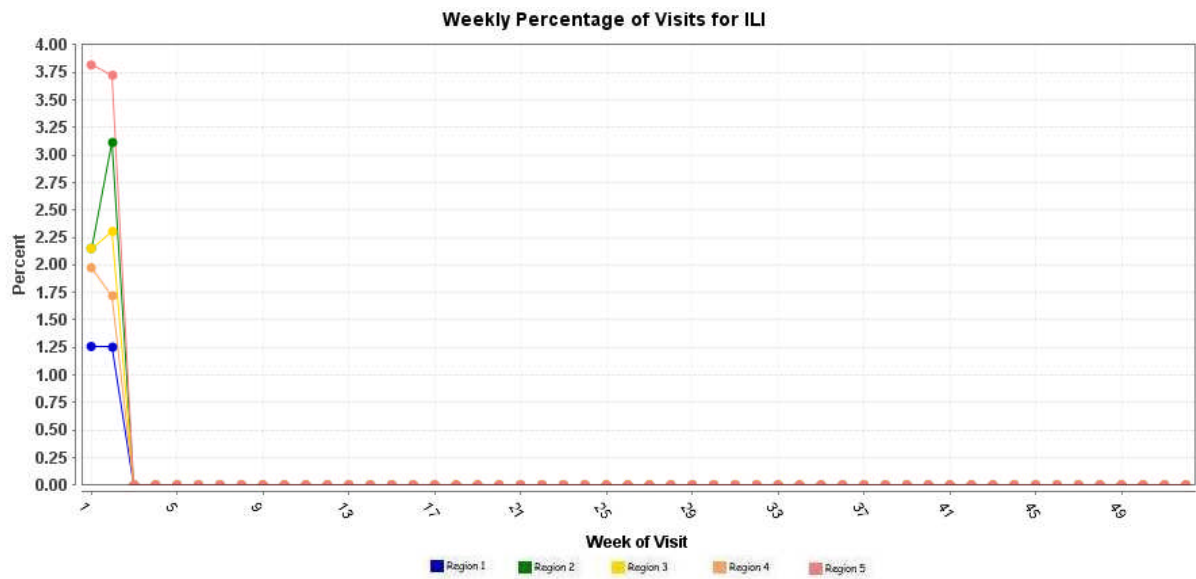
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

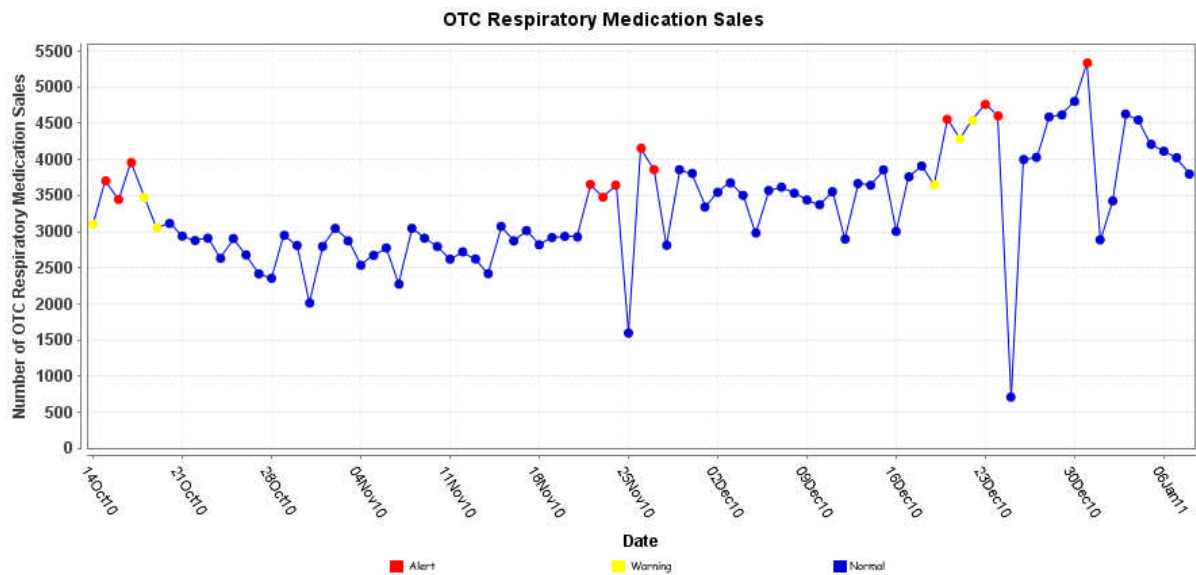


* Includes 2010 and 2011 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of January 5, 2011, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 516, of which 306 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

AVIAN INFLUENZA (SOUTH KOREA): 08 January 2011, Another outbreak of bird flu was confirmed at a duck farm in South Jeolla Province, Friday [7 Jan 2011]. The government said ducks at the farm in Yeongam tested positive for the virulent strain of the H5N1 avian influenza. This comes just one week after outbreaks of the highly contagious bird disease in Iksan, North Jeolla Province, and Cheonan, North Chungcheong Province, on 31 Dec 2010, raising concerns that the disease may be spreading across the country. The country has already been grappling for more than 2 months with the fast-spreading foot-and-mouth disease. Quarantine officials said initial on-site tests confirmed that the ducks in the latest case were infected with the H5N1 strain. All 14 500 birds on the farm and 84 400 birds on 4 other farms within a 500-meter radius from the outbreak have been ordered to be culled as a precautionary measure. South Korea had been hit by avian influenza 3 times before.

AVIAN INFLUENZA, HUMAN (EGYPT): 06 January 2011, The Ministry of Health of Egypt has announced 4 new cases of human infection with H5N1 avian influenza. A 56-year-old female from Sharkia Governorate: She developed symptoms on 22 Dec 2010, was hospitalized on 23 Dec 2010 and received treatment with oseltamivir. She was discharged from the hospital on 30 Dec 2010 in a stable condition. No information is available regarding poultry exposure. Investigations into the source of infection are underway. A 25-year-old female from Qena Governorate: She developed symptoms on 19 Dec 2010 and was admitted in the hospital on 27 Dec 2010 and died on 29 Dec 2010. Case investigation revealed that she had contact with poultry. A 27-year-old male from Ismailia Governorate: He developed symptoms on 23 Dec 2010 and was admitted to hospital on 28 Dec 2010. He is still under treatment in the hospital. No information is available regarding poultry exposure. Investigations into the source of infection are underway. A 40-year-old male from Dakahlia Governorate: He developed symptoms on 25 Dec 2010 and was admitted to hospital on 30 Dec 2010. He died on 2nd Jan 2011. He had contact with poultry. Laboratory tests have confirmed the H5N1 virus. Of the 119 cases confirmed to date in Egypt, 40 have been fatal.

NATIONAL DISEASE REPORTS

HANTAVIRUS (NEW MEXICO): 06 January 2011, The New Mexico Department of Health announced today [6 Jan 2011] that a 51-year-old man from McKinley County is hospitalized at UNM Hospital in Albuquerque with the State's 1st diagnosed case of hantavirus pulmonary syndrome this year [2011]. An environmental investigation will be conducted to determine where the man may have been exposed to the virus. "All New Mexicans should be aware of this disease and take precautions to avoid rodents and their droppings," said Dr. Paul Ettestad, the Department of Health's public health veterinarian. "This is especially important at this time of year when the cold weather is causing rodents to seek shelter and food in homes and other buildings. The best defense against [a] hantavirus [infection] is to seal up your house so mice can't enter and avoid disturbing areas of rodent infestation, including nests and droppings." Hantavirus[es] [can cause] a deadly disease transmitted by infected rodents through urine, droppings or saliva. People can contract the disease [virus] when they breathe hantavirus particles. The deer mouse [*Peromyscus maniculatus*] is the main reservoir for [Sin Nombre] hantavirus in New Mexico. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

HANTAVIRUS (Chile): 06 January 2011, An epidemiological investigation in the Chaquihuan sector of the municipality of Los Muermos is being carried out by teams from the Health SEREMI [Regional Ministerial Secretariat] Los Lagos after its epidemiological surveillance system reported the case of a 43-year-old who died with symptoms associated with hantavirus cardiopulmonary syndrome [HPS]. The site visit was conducted to determine the environmental conditions and risk factors that could be favorable for infections by [a] hantavirus, both at the home and in the vicinity of the place where the man was a farm worker. He died on Tue 4 Jan [2011] at the Hospital de Puerto Montt. The medical epidemiologist with the Health SEREMI, Jose Antonio Vergara, explained that despite awaiting [laboratory] results from the ISP [Public Health Institute], "this case may correspond to what usually occurs in rural areas where activities are agriculture and forestry, which by their very nature are high risk activities," said Vergara. Note that the summer season increases the likelihood of human exposure to the long-tailed mouse [long-tailed pygmy rice rat, *Oligoryzomys longicaudatus*] by either tourism or work activities. That is why the recommendations to the public should be strengthened. "We must be careful with the disposal of solid wastes and water to encourage mice to stay away from homes; it is

essential that people be careful when opening buildings that have been closed for long periods, such as summer cottages and countryside buildings. The most dangerous hours of exposure for people are during the night, since this is a nocturnal rodent," said Jose Antonio Vergara, medical epidemiologist. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

YELLOW FEVER (UGANDA): 06 January 2010, The International Rescue Committee (IRC) is responding to a rare outbreak of yellow fever which has so far claimed almost 50 lives in northern Uganda. To help curb the spread of the disease and treat those already infected, the IRC is training Ugandan health workers and community volunteers in the northern districts of Kitgum and Lamwo to detect, refer and treat the disease and is providing drugs, disinfectants, and protective gear including gloves and masks. The IRC will also assist in a government-run vaccination campaign that will reach 2.5 million people in Uganda's northern districts. Meanwhile, an IRC ambulance is carrying patients from isolated communities to hospitals. When the vaccination campaign begins later this month [January 2011], IRC health teams will help transport vaccines from storage facilities to inoculation sites. Dr. Alex Opio Chono, who directs the IRC's health programs in Uganda, said that the IRC is now focused on promoting preventative hygiene, bringing information to the public, and strengthening community involvement in detecting and reporting symptoms of yellow fever. "Our teams are travelling around the countryside, informing people about yellow fever and where they can receive inoculations," Dr. Chono said. "In collaboration with the district health authorities, we are also launching an information campaign with posters, radio spots, radio talk shows and community meetings." Yellow fever, [caused by a virus] transmitted by infected mosquitoes, was last recorded in Uganda almost 40 years ago, according to health officials. The disease has a wide range of symptoms from nausea and vomiting to jaundice, bleeding and kidney failure. About half of those who develop severe symptoms and are untreated die from the disease. The outbreak is affecting an area still recovering from 2 decades of civil war between the rebel Lord's Resistance Army and the Ugandan government. "The war destroyed many health facilities, and there is a severe shortage of trained medical staff, making this area particularly ill-equipped to handle an outbreak of such a serious disease," said Cristine Betters, the IRC director in Uganda. (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

YELLOW FEVER (COTE D'IVOIRE): 05 January 2011, Unrest following Cote d'Ivoire's presidential election is blocking a nationwide vaccination drive against yellow fever [YF], a fatal mosquito-borne disease that is affecting people throughout the country. In the past month, 11 people have died in the centre-north departments of Seguela, Katiola, and Beoumi; 2 cases of yellow fever have been confirmed, and there are a further 21 suspected cases in those departments and in nearby Mankono, according to local health workers and the World Health Organization (WHO). Health officials are still investigating the suspected cases, some of which could be dengue, WHO said. A yellow fever immunization drive initially planned for the end of November [2010] as part of a worldwide WHO and UN Children's Fund initiative has been postponed twice due to the current political situation. Rivals Alassane Ouattara and incumbent Laurent Gbagbo claim the presidency and have formed governments. There have been violent clashes, particularly in the west; in the commercial capital Abidjan pro-Gbagbo, youth have attacked UN personnel and vehicles. The UN says it recognizes Ouattara as president. "[The vaccination drive] was set again for 10-15 Jan [2011], but now again it looks like that won't be possible due to the insecurity," John Mulangu, WHO-Africa emergency and humanitarian action adviser, told IRIN. Nationwide campaigns imply that UN and local health workers go to communities in teams over a period of days, but WHO workers said this was currently not feasible. Another problem is that many district health directors who travelled to Abidjan to vote have not made it back to their posts because of insecurity on the roads and severely limited bus services. Yellow fever has no cure; it causes severe illness and kills about half of its victims, mostly due to lack of treatment for symptoms like dehydration. WHO says the single most important preventive measure is vaccination. WHO and local health officials told IRIN that people were being vaccinated on a small scale but said it was critical to cover the entire country. Coulibaly Seydou, Seguela health district director, said health workers were able to vaccinate people in some affected villages there on 26-28 Dec [2010]. "But given that yellow fever is transmitted by mosquitoes, it spreads easily; it doesn't stop at a village or district boundary," Coulibaly told IRIN. "It is important that the vaccination campaign be conducted in all targeted regions of the entire country," WHO's Mulangu said. "If we do not do this, we might see a spread of the disease with high morbidity and high mortality." (Viral Hemorrhagic Fever is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmd.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmd.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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